

PATENT COOPERATION TREATY

Rec'd PGT/PTO 03 DEC 2004

10/516873

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

Becker, Kurig, Straus
Bavariastrasse 7
DE-80336 MÜNCHEN
Germany

BECKER KURIG STRAUS
BAVARIASTRASSE 7 80336 MÜNCHEN

28. April 2004

WV: / F:

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY
EXAMINING AUTHORITY

(PCT Rule 66)

Date of mailing
(day/month/year)

26-04-2004

Applicant's or agent's file reference
51017WO

REPLY DUE

within 60 days from
the above date of mailing

TK 24.604
518

International application No.

PCT/IB 2002/002160

International filing date (day/month/year)

12-06-2002

Priority date (day/month/year)

International Patent Classification (IPC) or both national classification and IPC

G06F 3/02, G06F 1/16, H04M 1/725

Applicant

Nokia Corporation et al

1. ☐ The written opinion established by the International Searching Authority:
☐ is ☐ is not
considered to be a written opinion of the International Preliminary Examining Authority.

PC: 240604

140604

2. This first (first, etc.) opinion contains indications relating to the following items:

040604

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

TP-Deict

→ 100504 nAW

3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(e).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis. For an informal communication with the examiner, see Rule 66.6. For an additional opportunity to submit amendments, see Rule 66.4.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is:

12-10-2004

Name and mailing address of the IPEA/SE

Patent- och registreringsverket
Box 5055
S-102 42 STOCKHOLM

Facsimile No. 46 8 667 72 88

Authorized officer

Kristoffer Ogebjer /LR

Telephone No. 46 8 782 25 00

**WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY**

International application No.

PCT/IB 2002/002160

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))
☐ publication of the international application (under Rule 12.4)
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this opinion has been established on the basis of (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."*):

☒ the international application as originally filed/furnished

☐ the description:

pages _____ as originally filed/furnished

pages _____ received by this Authority on _____

pages _____ received by this Authority on _____

☐ the claims:

pages _____ as originally filed/furnished

pages _____ as amended (together with any statement) under Article 19

pages _____ received by this Authority on _____

pages _____ received by this Authority on _____

☐ the drawings:

pages _____ as originally filed/furnished

pages _____ received by this Authority on _____

pages _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to the sequence listing (*specify*): _____

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/IB 2002/002160

Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims

Claims

Inventive step (IS)

Claims

1-18

Claims

Industrial applicability (IA)

Claims

Claims

2. Citations and explanations:

D1: EP, A2, 0933908

D2: WO, A1, 0131897

D3: US, A1, 2002006815

D4: US, A1, 2002044136

The object of the invention is to provide a keyboard with improved usability of double function assigned keys.

D1, which is considered to be the closest state of the art, discloses a set of keys acting as keys of a telephone keypad and keys of an alphanumeric keypad, depending on the typing mode set by the user. A subset of keys having double assigned functions. A key is pressed in order to change mode.

The invention according to claims 1,2 differs from what D1 states in the matter of stating that a set of keys are for entering control letters in relationship with the telephone number. The problem underlying the present application according to claim 1 is consequently to implement control keys on the keypad of D1. But according to D1 there are 20 keys that are acting as a telephone keypad. It would be obvious to a person skilled in the art to implement different control letters to the keys not used for numbers in the keypad (20). The invention according to claims 1,2 is therefore considered to lack an inventive step.

The invention according to claims 4 and 18 differs from what D1 discloses in the matter of the third set of commands representing first set of keys with second assigned functions and second set of keys with first assigned functions. The effect this feature is that the both the functions of the different set of key may be used simultaneously.

.../...

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/IB 2002/002160

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

The problem, underlying the present application according to claims 4 and 18 is consequently, that the text-keypad could be used as well as the number-keypad in order to use these keys as control keys.

The skilled person looking for a solution to enable the use of the rest of the keypad in D1 would without requiring an extra inventive activity implement a third mode where the number-keypad (20) could be used simultaneously as the rest of the keypad 11b in order to use these keys as control keys (see D4 which disclose the function a NUM-lock key). The invention according to claims 4 and 18 is considered obvious to a person skilled in the art and fails to involve an inventive step.

The invention according to the dependent claims 3,5-17 merely states details obvious to a person skilled in the art. Details that do not require an inventive activity by the person skilled in the art to implement in the device of D1 to arrive at the claimed invention. Hence, the invention according to claims 3,5-17 does not involve an inventive step.

D2 discloses a keyboard (126) where a control key on the keyboard 126 may be used to place the keyboard 126 in a first operational mode. In the first operational mode, a 3.times.4 matrix of keys on the keyboard 126 are activated and function in a manner identical to the 3.times.4 matrix of keys on a conventional wireless communication device.

In a second mode of operation, the keyboard 126 functions as a conventional keyboard to allow the entry alphanumeric text, which is stored in the text data storage area 132 (see FIG. 1) as described above. The system 100 may be toggled back and forth between the first and second modes of operation through the activation of selected keys on the keyboard 126. The keys of the keyboard 126 may be conveniently labelled to indicate dual-functionality in the two different modes of operation.

D3 relates to a mobile device with a divided keyboard.

D4 disclose the general feature of using a NUM lock key 32C for selecting numbers associated with letter keys.